Australian Bureau of Statistics

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Summary

Contents

CONTENTS

In this issue

NOTES

ABOUT THIS PUBLICATION

This publication presents information about the educational experience and associated characteristics of persons aged 15 to 74 years.

Statistics in this publication were collected in May 2013 as a supplement to the Australian Bureau of Statistics' (ABS) monthly Labour Force Survey (LFS).

Information collected in the survey includes: labour force characteristics; participation in education in the survey month and in the year prior to the survey; type of educational institution attended; level of education of current and previous study; highest year of school completed; level of highest non-school qualification; level of highest educational attainment; transition from education to work; enrolment experience; selected characteristics of apprentices and trainees; and unmet demand for apprenticeships and traineeships.

Information on the concepts and methods used in the survey, reliability of the results, definitions and interpretation are included in the Explanatory Notes, Technical Note and Glossary. Unless otherwise specified, differences between data items highlighted in the Summary of Findings are statistically significant (refer to the Significance Testing section of the Technical Note).

This release consists of Data Cubes in spreadsheet format only. An expanded range of statistics are available in the publication Education and Work, Australia - Additional data cubes, May 2013 (cat. no. 6227.0.55.003).

ROUNDING

As estimates have been rounded, discrepancies may occur between the sum of component items and the published total. Published percentages are calculated prior to rounding and therefore some discrepancy may occur between these percentages and those that could be calculated from the rounded figures.

MORE INFORMATION ON EDUCATION STATISTICS

Information about Australian Bureau of Statistics' (ABS) activities in the education and training field is available from the Topics @ a Glance - Education and Training page on the ABS website.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

Participation

PARTICIPATION

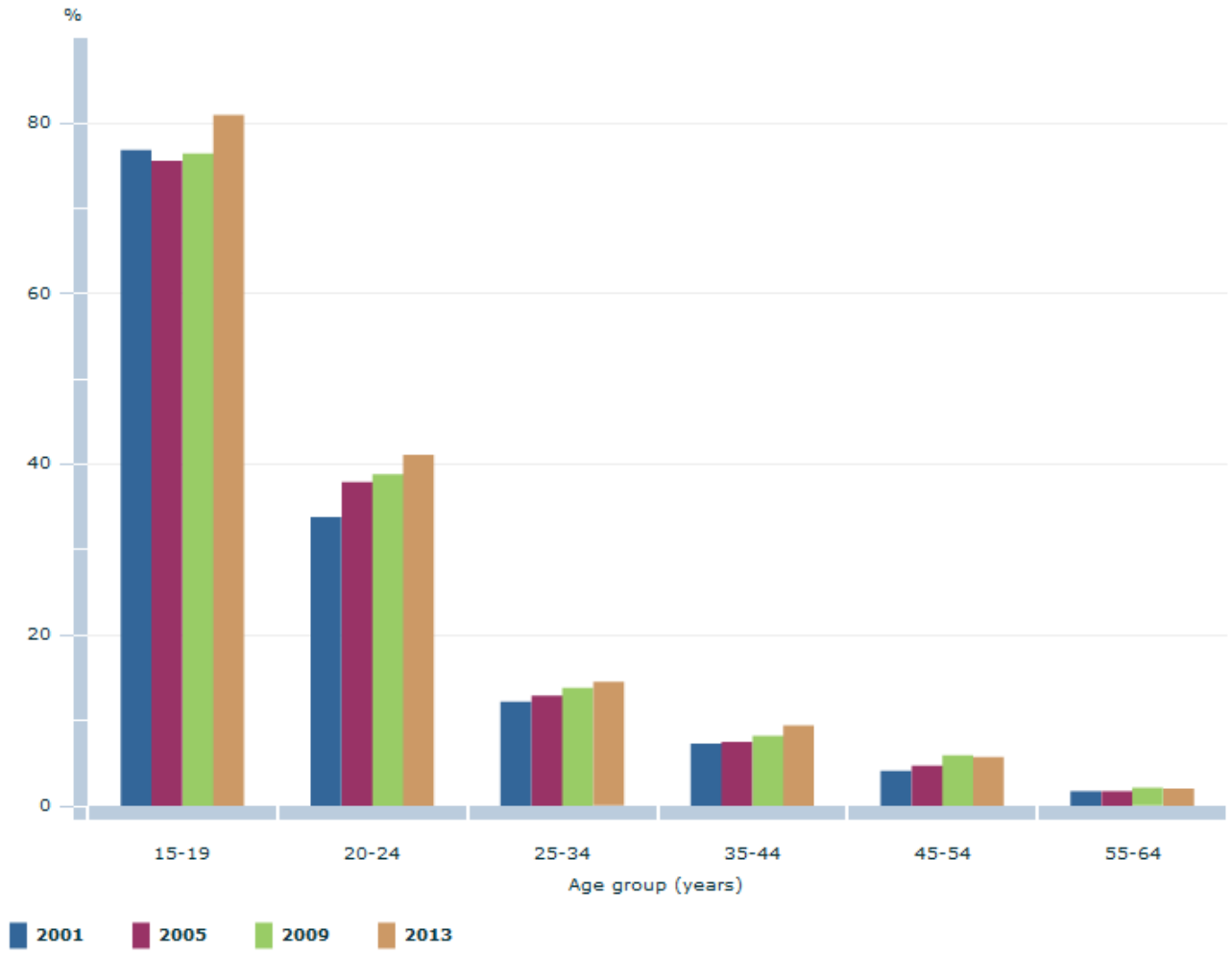
In May 2013, it was estimated that, of the 15.5 million people aged 15-64 years in Australia, 2.9 million, or 19%, were enrolled in formal study. This comprised 2.1 million people undertaking a non-school qualification and 813,600 undertaking school level study. Of those people enrolled in formal study:

- 53% were female
- 41% were aged 15-19 years and 24% were aged 20-24 years
- 66% were enrolled full time
- 25% were born overseas and
- 5.7% held a current student visa. (Table 1)

Approximately 1.2 million (40%) were attending a higher education institution, 828,600 (29%) were at school, 528,800 (18%) were at Technical and Further Education (TAFE) institutions and 381,800 (13%) were at other educational institutions. (Table 1)

The proportion of people aged 15-64 years who were enrolled in formal study increased from 17% in May 2001 to 19% in May 2013. Of females aged 15-64 years, the proportion enrolled in formal study rose from approximately 17% in 2001 to 20% in 2013. Male enrolments increased from 17% in 2001 to 18% over the same time period. (Table 2)

GRAPH 1: PROPORTION OF PEOPLE AGED 15–64 YEARS ENROLLED IN FORMAL STUDY, BY AGE GROUP, MAY 2001 TO MAY 2013



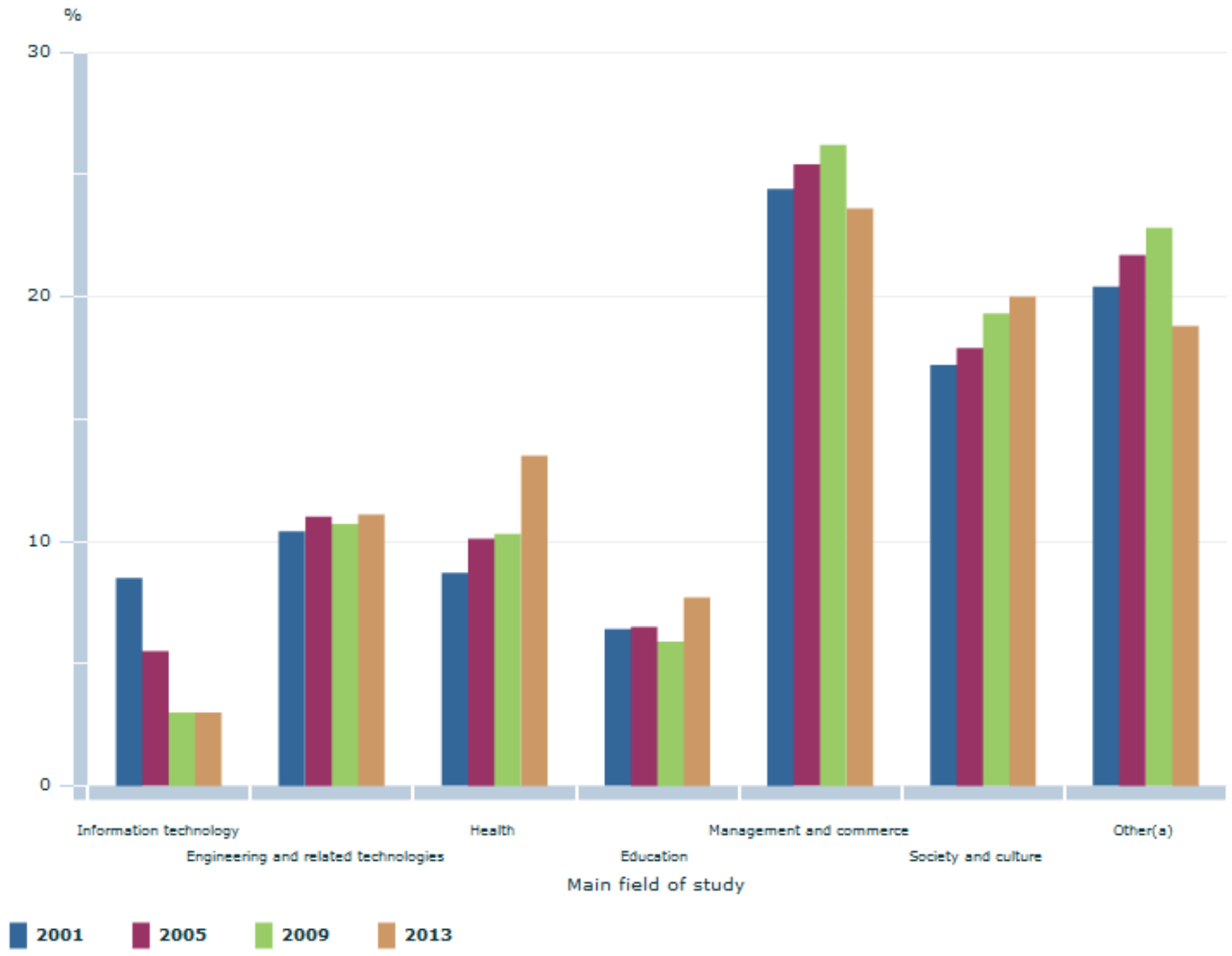
Source(s): Education and Work, Australia, May 2013

More than one third (39%) of people aged 15-64 years who were enrolled in a non-school qualification were studying for a Bachelor Degree. Of people studying for a Bachelor Degree, almost three quarters were aged less than 25 years (47% were aged 20-24 years and 26% were aged 15-19 years). (Table 3)

More females than males were studying at every level of non-school education, other than Certificate III or IV. Of males enrolled in a non-school qualification 29% were studying for a Certificate III or IV, compared with 22% of females. (Table 3)

As in previous years, the most commonly reported main field of study for people aged 15-64 years enrolled in a non-school qualification was Management and commerce (24%), followed by Society and culture (20%). People studying Information technology decreased from 8.5% in 2001 to 3.0% in 2013, while the proportion of people studying Health increased from 8.7% to 13% over the same period. (Table 7)

GRAPH 2: PROPORTION OF PEOPLE AGED 15–64 YEARS ENROLLED IN FORMAL STUDY, BY MAIN FIELD, MAY 2001 TO MAY 2013

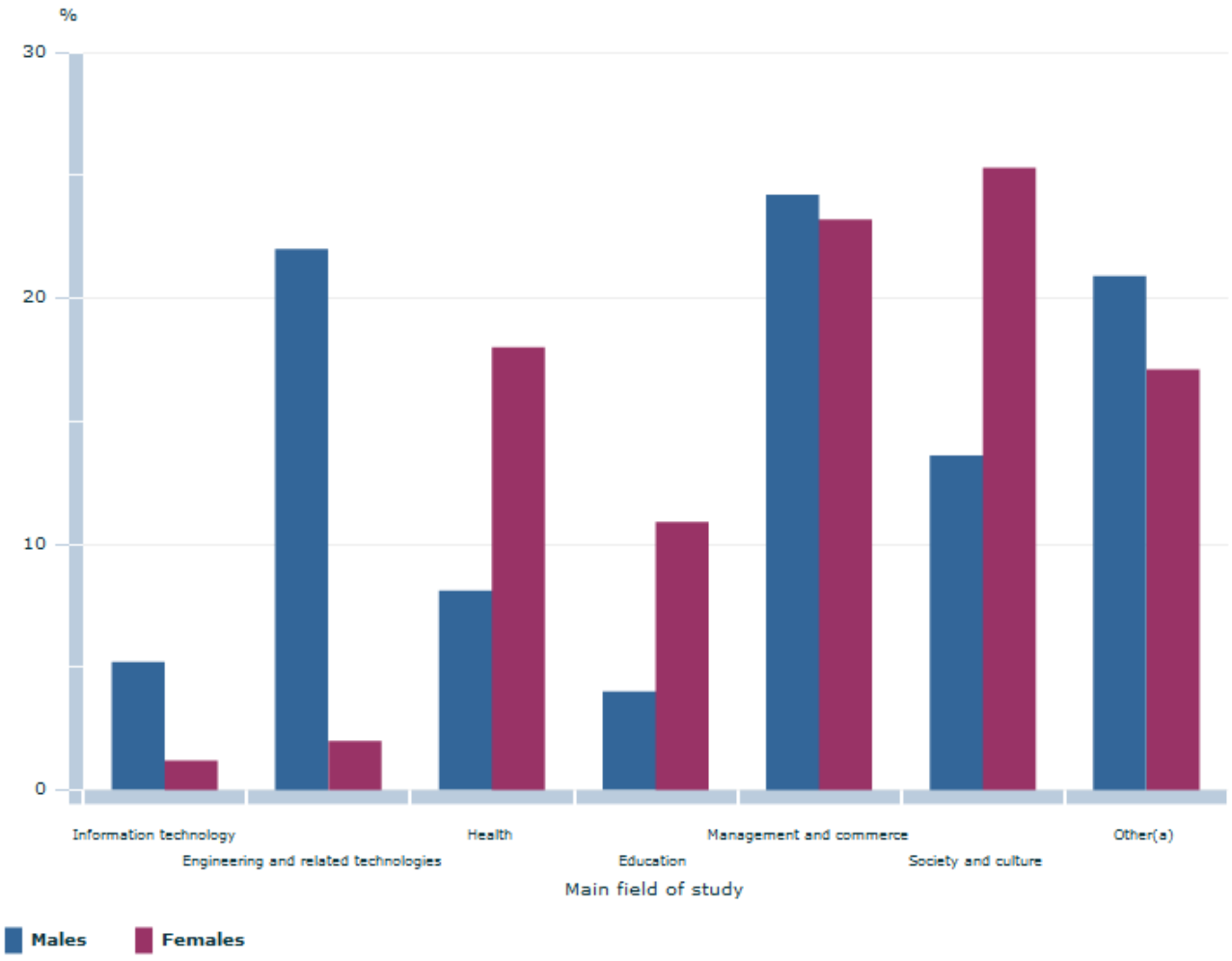


Footnote(s): (a) Includes Natural and physical sciences; Architecture and Building; Agriculture, environmental and related studies; Creative arts and Food and hospitality services.

Source(s): Education and Work, Australia, May 2013

More females than males were studying in the fields of Society and culture (288,000 and 128,000 respectively) while one-fifth (22%) of males were studying Engineering and related technologies, compared with 2.0% of females. Of the 161,200 people aged 15-64 years enrolled in the field of Education, 77% were female. (Tables 4)

GRAPH 3: PROPORTION OF PEOPLE AGED 15–64 YEARS ENROLLED IN FORMAL STUDY, BY MAIN FIELD AND SEX



Footnote(s): (a) Includes Natural and physical sciences; Architecture and Building; Agriculture, environmental and related studies; Creative arts and Food and hospitality services.

Source(s): Education and Work, Australia, May 2013

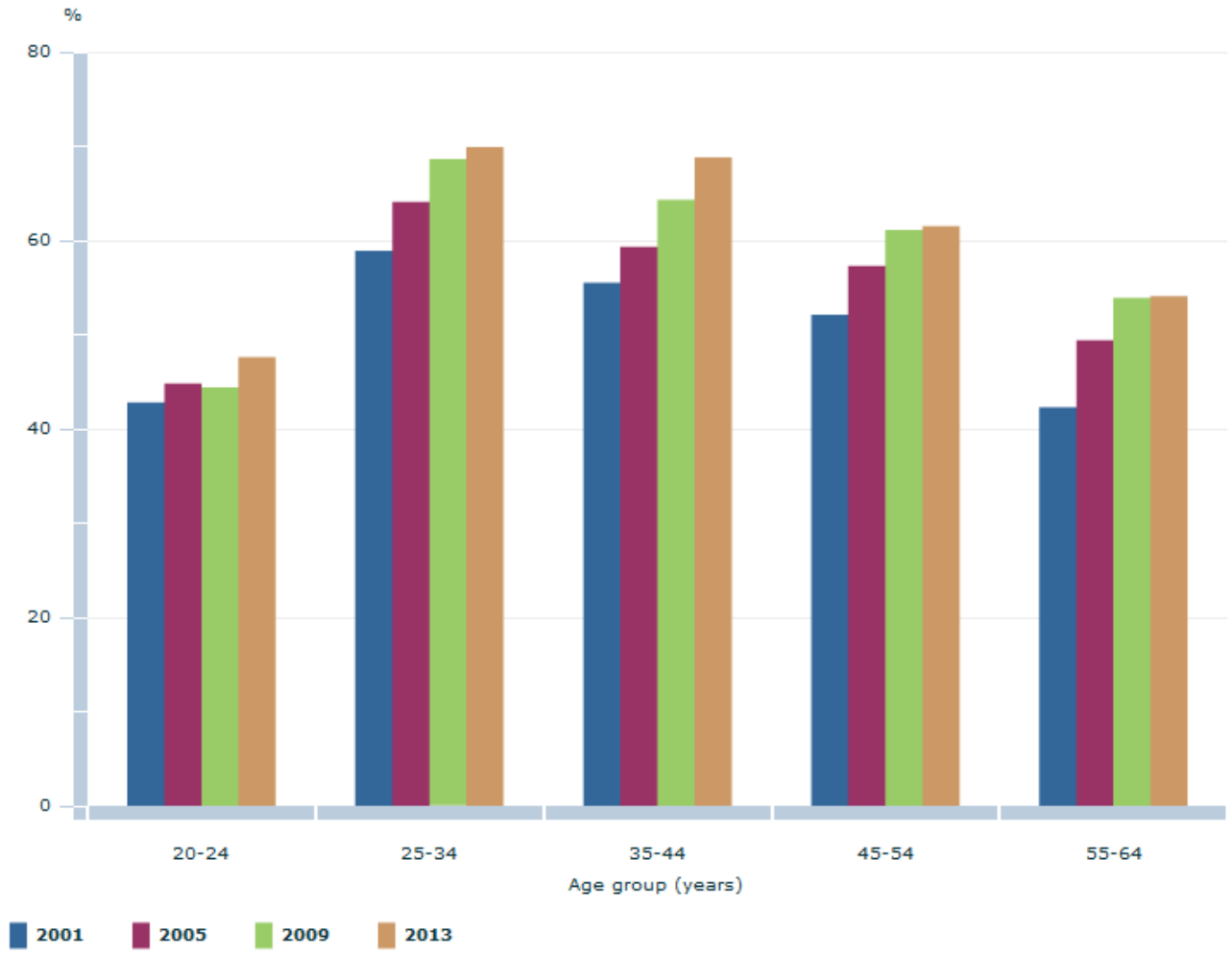
Attainment

ATTAINMENT

LEVEL OF HIGHEST NON-SCHOOL QUALIFICATION

The proportion of people aged 15-64 years with a non-school qualification increased from 47% in 2001 to 57% in 2013, with the proportion of people with a Bachelor Degree or above increasing from 17% to 25%. Over the same period, the proportion of people whose highest non-school qualification was an Advanced Diploma or below only increased from 29% to 32%. The proportion of people aged 55-64 years with a non-school qualification increased from 42% in May 2001 to 54% in May 2013 while the proportion for people aged 25-34 years increased from 59% to 70%. (Table 8)

GRAPH 4: PROPORTION OF PEOPLE AGED 20–64 YEARS WITH A NON-SCHOOL QUALIFICATION, BY AGE GROUP, MAY 2001 TO MAY 2013



Source(s): Education and Work, Australia, May 2013

In May 2013, a similar number of males and females aged 15-64 years had a non-school qualification (4.4 million for both males and females). People who were Australian or New Zealand citizens (56%) were less likely to have a non-school qualification than people who were not citizens (67%). A similar proportion of people with permanent visas (67%) and temporary visas (69%) had a non-school qualification. Temporary residents who were not here on student visas (77%) were the most likely to have a non-school qualification. (Table 9)

Among the 8.9 million people aged 15-64 years with a non-school qualification, the most common main fields of study for the highest non-school qualification were Management and commerce (2.1 million or 24%) and Engineering and related technologies (1.4 million or 16%). (Table 12)

LEVEL OF HIGHEST EDUCATIONAL ATTAINMENT

Just over a quarter (27%) of people aged 15-64 years reported their highest educational attainment as Year 11 or below and 20% reported Year 12. A further 18% had a highest level of attainment of a Certificate III or IV, 17% had a Bachelor degree, 2.7% had a Graduate Diploma or Graduate Certificate and 5.0% had a Postgraduate Degree. Almost two-fifths (39%) of people in the ACT had a Bachelor Degree or above as their highest level of educational attainment, the highest proportion of all states and territories. (Tables 14)

A higher proportion of males than females reported their level of highest educational attainment as Certificate III or IV, with 23% of all males reporting this qualification, compared with 14% of females. However, a higher proportion of females (27%) than males (22%) had obtained a Bachelor Degree or higher qualification. (Table 14)

In May 2013, of the 1.8 million people aged 65-74 years, 385,800 (21%) were employed. Almost a quarter (24%) of employed 65-74 year olds had a Bachelor Degree or above compared with 12% of 65-74 year olds who were not employed. Over half (56%) of people 65-74 years who were not employed had a highest educational attainment below Year 12, compared with 37% of people 65-74 years who were employed. (Table 15)

Transition from education to work

TRANSITION FROM EDUCATION TO WORK

COMPLETING A NON-SCHOOL QUALIFICATION

In May 2013, there were 1.2 million people aged 15-64 years who had completed the non-school qualification in which they were enrolled in 2012. Over four-fifths (81%) of these were employed in May 2013, while 6.6% were unemployed. Employment rates for those aged 25-44 and 45-64 were 82% and 85% respectively. The proportion of males who had completed the non-school qualification and were employed was 84% compared to 78% of females. (Table 16)

SCHOOL LEAVERS

There were 319,800 people aged 15-24 years who were enrolled in secondary school in 2012 but were not in May 2013. Of these school leavers, 75% had completed Year 12.

In 2013, 59% (187,300 people) of all school leavers were enrolled in formal study at a non-school institution (with 60% of these people undertaking a Bachelor degree or higher). The number of school leavers who were not studying was 132,500 (41%) and of these:

- 82,700 were employed
- 20,000 were unemployed and
- 29,900 were not in the labour force. (Table 19)

Apprentices and trainees

APPRENTICES AND TRAINEES

In May 2013, there were 198,400 people aged 15-64 years who were employed as apprentices or trainees and part of the Australian Apprenticeship Scheme. Of these, 96,200 people (48%) had commenced their apprenticeship or traineeship in the last 12 months. The majority of apprentices or trainees were male (81%). The highest number of apprentices and trainees were working in the Construction industry (71,300). (Table 21)

There were 19,000 people who gained a place for an apprenticeship/traineeship but were not undertaking it in May 2013, while 34,500 people who applied for an apprenticeship/traineeship were unsuccessful in gaining a place in 2013. (Table 22)

Additional data

ADDITIONAL DATA

An expanded range of statistics are available in the publication Education and Work, Australia - Additional data cubes, May 2013 (cat. no. 6227.0.55.003). This publication includes data on key participation and attainment indicators in education and training.

For users who wish to undertake more detailed analysis of the survey data, the survey microdata will be released through the TableBuilder product in 2014. For more details, refer to the TableBuilder information, Microdata: Education and Work, Australia (cat. no. 6227.0.30.001).

About this Release

Provides selected information on participation in education, highest educational attainment, transition from education to work and current labour force and demographic characteristics for the civilian population aged 15-74 years. Characteristics reported on include: type of educational institution attended or attending; level and main field of education of current study and highest level and main field of educational attainment.

Information on unsuccessful enrolment, and deferment of study, is included for persons not studying in the survey year. Data on apprenticeships are also provided. Some of the statistical tables are presented in time series format.

This product includes Data Cubes in spreadsheet format only.

Explanatory Notes

Explanatory Notes

EXPLANATORY NOTES

INTRODUCTION

1 This publication contains results from the 2013 Survey of Education and Work (SEW) conducted throughout Australia in May 2013 as a supplement to the monthly Labour Force Survey (LFS). Respondents to the LFS who were in scope of the supplementary survey were asked further questions about education.

2 The SEW provides annual information on a range of key indicators of educational participation and attainment of persons aged 15-74 years, along with data on people's transition between education and work. The annual time series allows for ongoing monitoring of the level of education of Australia's population including participation in current and previous study; type of educational institution attended; highest year of school completed; level and field of highest non-school qualification; characteristics of people's transition between education and work; and selected characteristics of apprentices and trainees.

3 The publication Labour Force, Australia (cat. no. 6202.0) contains information about survey design, sample redesign, scope, coverage and population benchmarks relevant to the monthly LFS, which also apply to supplementary surveys. It also contains definitions of demographic and labour force characteristics.

CONCEPTS, SOURCES AND METHODS

4 The conceptual framework used in Australia's LFS aligns closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling these estimates, are presented in Labour Statistics: Concepts, Sources and Methods, 2013 (cat. no. 6102.0.55.001) which is available on the ABS website.

SCOPE AND COVERAGE

Scope

5 The scope of the SEW is restricted to persons aged 15-74 years who were usual residents of private dwellings and non-institutionalised special dwellings excluding:

- members of the permanent defence forces;
- certain diplomatic personnel of overseas governments, customarily excluded from the Census of Population and Housing and estimated resident populations;
- overseas residents in Australia;
- members of non-Australian defence forces (and their dependants);
- institutionalised persons (e.g. patients in hospitals, residents of retirement homes, residents of homes for persons with disabilities, inmates of prisons); and
- boarding school pupils.

6 Boarding school pupils have been excluded from the scope of the SEW since 2005, but were included in earlier collections. The LFS in May 2013 yielded an estimate of 16,700 boarding school pupils aged 15 years and over, who were excluded from the SEW.

7 In 2013, the scope of SEW was extended to include all persons aged 65-74 years for the first time. This comprised including those people in this age group who were not in the labour force or not marginally attached to the labour force who had previously been excluded from the sample. In addition, persons who are permanently unable to work were also included in the scope of SEW for the first time. There were an estimated 409,700 people who reported being permanently unable to work in May 2013.

8 In 2009, persons aged 65-74 years who were in the labour force, or were marginally attached to the labour force, were interviewed for the first time for SEW. Persons were determined to be marginally attached to the labour force if they were not in the labour force in the reference week, wanted to work and:

- were actively looking for work but did not meet the availability criteria to be classified as unemployed; or
- were not actively looking for work but were available to start work within four weeks or could start work within four weeks.

9 This supplementary survey was conducted in both urban and rural areas in all states and territories, but excluded people living in Indigenous communities in very remote parts of Australia. The exclusion of people living in these areas is unlikely to impact on state and territory estimates, except in the Northern Territory where they account for approximately 15% of the total population aged 15–74 years.

Coverage

10 The estimates in this publication relate to persons covered by the survey scope. In the LFS, coverage rules are applied which aim to ensure that each person is associated with only one dwelling and hence has only one chance of selection in the survey. See Labour Force, Australia (cat. no. 6202.0) for more details.

11 Every five years, following the availability of data from the Census of Population and Housing, the ABS reviews the LFS sample design to ensure that the sample continues to represent the Australian population accurately. The latest review, based on 2011 Census data, has been completed with the new LFS sample phased-in over the four months from May to August 2013. Introducing two rotation groups from the new sample per month, i.e. one-quarter of the survey sample, reduces the proportion of common selections each month over the period between May and August 2013 when compared to previous phase-in implementations over eight months or one rotation group each month. While this has an impact on standard errors for month-to-month movement estimates of the labour force, there is minimal impact on the quality of level estimates for a point in time survey such as SEW. This sample for the SEW 2013 comprised of two rotation groups based on the new 2011 Census based sample and five rotation groups based on the 2006 Census based sample. Overall, the 2011 sample design generally maintains standard errors at the levels targeted under the 2006 sample design. For more information see Information Paper: Labour Force Survey Sample Design, May 2013 (cat. no. 6269.0).

SAMPLE SIZE

12 Approximately 94% of the selected households were fully responding to the SEW, which resulted in around 43,600 completed interviews. The 2013 sample size was approximately 10% larger than the 2012 sample due to the larger in-scope population.

DATA COLLECTION

13 Information was collected from respondents over a two week period in May 2013. The data were mainly collected through interviews, conducted either face-to-face or over the telephone, while some respondents were able to provide their information over the Internet via a self-completed form.

14 In December 2012, the ABS began a trial of online self-completion for a small proportion of households in the Labour Force Survey. The trial was conducted on one rotation group (i.e. one-eighth of the survey sample) where all households were offered the option of completing the survey online in place of a face-to-face or telephone interview. The offer of online self-completion was extended from May 2013 with the offer coinciding with the phase-in of the new LFS sample, i.e. for May 2013 the option of online completion was offered to households in a further two rotation groups. However, for these new rotation groups the offer was restricted to 50% of households in each group. The extension of the offer in May was in addition to the initial rotation group that began in December of 2012, resulting in the option of self-completion for the LFS being offered to the equivalent of one-quarter of the survey sample.

15 The May 2013 SEW was the first supplementary survey to incorporate this online data collection method. As supplementary surveys such as the SEW are restricted to seven-eighths of the LFS sample, the option of self-completion was offered to just over one-quarter of the sample available for SEW. Respondents who took up the online option represented 4.4% of the total SEW sample. While those respondents who chose to complete the survey online may have different characteristics to those who undertake the survey via face-to-face or telephone interview, the ABS has not detected any significant impacts due to the introduction of online collection. However, the ABS will continue to monitor any impacts through a measurement strategy and report these in the Labour Force, Australia (cat. no. 6202.0). For further information see the article Transition to Online Collection of the Labour Force Survey.

16 All information, either from interview or online self-completion, was obtained from any responsible adult in the household who was asked to respond on behalf of all persons in the household in scope of the survey. All interviews were conducted using computer assisted interviewing (CAI).

ESTIMATION METHOD

Weighting

17 Weighting is the process of adjusting results from a sample survey to infer results for the total population. To do this, a 'weight' is allocated to each enumerated person. The weight is a value which indicates how many persons in the population are represented by the sample person.

18 The first step in calculating weights for each unit is to assign an initial weight, which is the inverse of the probability of the unit being selected in the survey. For example, if the probability of a person being selected in the survey was 1 in 300, then the person would have an initial weight of 300 (that is, they represent 300 people).

Population benchmarks

19 The initial weights are then calibrated to align with independent estimates of the population, referred to as benchmarks. The population included in the benchmarks is the survey scope. This calibration process ensures that the weighted data conform to the independently estimated distribution of the population described by the benchmarks rather than to the distribution within the sample itself. Calibration to population benchmarks helps to compensate for over or under-enumeration of particular categories of persons which may occur due to either the random nature of sampling or non-response.

20 The survey was benchmarked to the estimated resident population (ERP) aged 15-74 years living in private dwellings and non-institutionalised special dwellings in each state and territory. People living in Indigenous communities in very remote parts of Australia were excluded.

Estimation

21 Survey estimates of counts of persons are obtained by summing the weights of persons with the characteristics of interest.

RELIABILITY OF THE ESTIMATES

22 All sample surveys are subject to error which can be broadly categorised as either:

- sampling error; or
- non-sampling error.

23 Sampling error is the difference between the published estimates, derived from a sample of persons, and the value that would have been produced if the total population (as defined by the scope of the survey) had been included in the survey. For more information refer to the Technical Note.

24 Non-sampling error may occur in any collection, whether it is based on a sample or a full count such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or recording answers by interviewers, and errors in coding and processing data. Every effort is made to reduce the non-sampling error by careful design and testing of the questionnaire, training and supervision of interviewers, follow-up of respondents, and extensive editing and quality control procedures at all stages of data processing.

Seasonal factors

25 The estimates are based on information collected in the survey month, and due to seasonal factors they may not be representative of other months of the year.

DATA QUALITY

Interpretation of results

26 The method of obtaining information about all the persons in the household from any responsible adult is only used for collecting information on topics where other members of the household are likely to be able to answer the questions. If the ARA is unable to supply all of the details for another individual in the household, a personal interview is conducted with that particular individual.

DATA COMPARABILITY

Comparability of time series

27 Supplementary surveys are not always conducted on the full LFS sample. Since August 1994 the sample for supplementary surveys has been restricted to no more than seven-eighths of the LFS sample. Since it was introduced, this survey has been conducted on various proportional samples and therefore sampling errors associated with previous supplementary surveys may vary from the sampling error for this survey.

28 Since 2005, boarding school pupils have been excluded from the scope of the SEW, but were included in earlier collections. For more details, see the Scope section of these Explanatory Notes.

29 Since 2007, industry data in the SEW have been classified according to the Australian and New Zealand Standard Industrial Classification, 2006 (cat. no. 1292.0) and prior to this, were classified according to the Australian and New Zealand Standard Industrial Classification, 1993 (cat. no. 1292.0). Therefore, industry data from SEW prior to 2007 are not directly comparable to data for 2007 and subsequent years.

30 Since 2007, occupation data in the SEW have been classified according to the Australia and New Zealand Standard Classifications of Occupations, First Edition (cat. no. 1220.0) and prior to this, were classified according to the Australia Standard Classifications of Occupations, Second Edition, 1997 (cat. no. 1220.0). Occupation data are not directly comparable between these two editions of the classification. Therefore, occupation data from SEW prior to 2007 are not directly comparable to 2007 and subsequent years.

31 Prior to 2008, only persons aged 15-54 years were included in the apprenticeship/traineeship survey questions. In 2008, the age scope was extended to include persons aged 55-64 years and in 2009, the scope was further extended to include persons aged 65-74 years for these questions. In 2008, the definition for apprentices and trainees changed from those employed as apprentices/trainees to include only those with a formal contract under the **Australian Apprenticeship Scheme**. Therefore data on apprentices from previous years are not directly comparable to 2008 and subsequent data. Note that **Australian School-based Apprenticeships** are excluded.

32 Revisions are made to population benchmarks for the LFS after each five-yearly Census of Population and Housing. The last such revision was made in February 2009 to take account of the results of the **2006 Census of Population and Housing**. Estimates from supplementary surveys conducted from and including 2009 are therefore based on these 2006 population benchmarks.

33 Revisions have been made to the 2010 data presented in the 2011, 2012 and 2013 Survey of Education and Work (SEW) releases. Estimates for 2010 have been compiled using population benchmarks that incorporate revisions made to Net Overseas Migration estimates, published in the September 2008 and September 2009 issues of Australian Demographic Statistics (cat. no. 3101.0). The revisions also include a correction to the population benchmarks for the 2010 SEW to align them with the survey scope for the Northern Territory (NT) in relation to Indigenous communities in very remote areas. The impact on the Australian estimates for SEW 2010 is minimal, with the change mainly affecting the Northern Territory. While the change results in a reduction in the size of the Northern Territory population estimate, it has a minor impact only on the distribution of characteristics.

34 Revisions were made to the in-scope population in 2013. All respondents aged 65-74 years were included for the first time, rather than just those in the labour force or marginally attached to the labour force. Persons who were permanently unable to work were also included.

Comparability with other ABS surveys

35 Since the SEW is conducted as a supplement to the LFS, data items collected in the LFS are also available in SEW. However, there are some important differences between the two surveys. The SEW sample is a subset of the LFS sample (see the Introduction of these Explanatory Notes) and the SEW had a response rate of 94% which is lower than the LFS response rate of 95% for the same period. Also the scope of the SEW differs slightly to the scope of the LFS (refer to the Scope section above). Due to these differences between the samples, the SEW data are weighted as a separate process to the weighting of LFS data. Differences may therefore be found in the estimates collected in the LFS and published as part of the SEW, when compared with estimates published in the May 2013 issue of Labour Force, Australia (cat. no. 6202.0).

36 Additionally, estimates from the SEW may differ from the estimates produced from other ABS collections, for several reasons. The SEW is a sample survey and its results are subject to sampling error. Results may differ from other sample surveys, which are also subject to sampling error. Users should take account of the relative standard errors (RSEs) on estimates and those of other survey estimates where comparisons are made.

37 Differences may also exist in the scope and/or coverage of the SEW compared to other surveys. Differences in estimates, when compared to the estimates of other surveys, may result from different reference periods reflecting seasonal variations, non-seasonal events that may have impacted on one period but not another, or because of underlying trends in the phenomena being measured.

38 Finally, differences can occur as a result of using different collection methodologies. This is often evident in comparisons of similar data items reported from different ABS collections where, after taking account of definition and scope differences and sampling error, residual differences remain. These differences are often the result of the mode of the collections, such as whether data are collected by an interviewer or self-enumerated by the respondent and whether the data are collected from the person themselves or from a proxy respondent. Differences may also result from the context in which questions are asked, i.e. where in the interview the questions are asked and the nature of preceding questions. The impacts on data of different collection methodologies are difficult to quantify. As a result, every effort is made to minimise such differences.

CLASSIFICATIONS

Country of birth

39 Country of birth data are classified according to the Standard Australian Classification of Countries (SACC), Second Edition, 2008 (cat. no. 1269.0).

Industry

40 Industry data are classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), Revision 1 (cat. no. 1292.0).

Occupation

41 Occupation data are classified according to the Australia and New Zealand Standard Classifications of Occupations (ANZSCO), First Edition, Revision 1 (cat. no. 1220.0).

Education

42 Education data are coded to the Australian Standard Classification of Education, 2001 (cat. no. 1272.0). The ASCED is a national standard classification which can be applied to all sectors of the Australian education system including schools, vocational education and training and higher education.

The ASCED comprises two classifications: Level of Education and Field of Education.

43 Level of Education is defined as a function of the quality and quantity of learning involved in an educational activity. There are nine broad levels, 15 narrow levels and 64 detailed levels. For definitions of these levels see the Australian Standard Classification of Education, 2001 (cat. no. 1272.0).

44 Field of Education is defined as the subject matter of an educational activity. Fields of education are related to each other through the similarity of subject matter, through the broad purpose for which the education is undertaken, and through the theoretical content which underpins the subject matter. There are 12 broad fields, 71 narrow fields and 356 detailed fields. For definitions of these fields see the Australian Standard Classification of Education, 2001 (cat. no. 1272.0).

Level of highest educational attainment

45 Level of highest educational attainment was derived from information on highest year of school completed and level of highest non-school qualification. The derivation process determines which of the 'non-school' or 'school' attainments will be regarded as the highest. Usually the higher ranking attainment is self-evident, but in some cases some secondary education is regarded, for the purposes of obtaining a single measure, as higher than some certificate level attainments.

46 The following decision table is used to determine which of the responses to questions on highest year of school completed (coded to ASCED Broad Level 6) and level of highest non-school qualification (coded to ASCED Broad Level 5) is regarded as the highest. It is emphasised that this table was designed for the purpose of obtaining a single value for level of highest educational attainment and is not intended to convey any other ordinality.

Decision Table: Level of Highest Educational Attainment (ASCED level of education codes)

Highest year of school completed	Level of highest non-school qualification						
	Certificate n.f.d. (500)	Certificate III or IV n.f.d. (510)	Certificate IV (511)	Certificate III (514)	Certificate I or II n.f.d. (520)	Certificate II (521)	Certificate I (524)
Secondary Education n.f.d. (600)	Secondary Education n.f.d.	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Certificate I or II n.f.d.	Certificate II	Certificate I
Senior Secondary Education n.f.d. (610)	Senior Secondary n.f.d.	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Senior Secondary n.f.d.	Senior Secondary n.f.d.	Senior Secondary n.f.d.
Year 12 (611)	Year 12	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Year 12	Year 12	Year 12
Year 11 (613)	Year 11	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Year 11	Year 11	Year 11
Junior Secondary Education n.f.d. (620)	Junior Secondary Education n.f.d.	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Certificate I or II n.f.d.	Certificate II	Certificate I
Year 10 (621)	Year 10	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Year 10	Year 10	Year 10
Year 9 (622)	Year 9	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Certificate I or II n.f.d.	Certificate II	Certificate I
Year 8 (623)	Year 8	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Certificate I or II n.f.d.	Certificate II	Certificate I
Year 7 (624)	Year 7	Certificate III or IV n.f.d.	Certificate IV	Certificate III	Certificate I or II n.f.d.	Certificate II	Certificate I

47 The decision table is also used to rank the information provided in a survey about the qualifications and attainments of a single individual. It does not represent any basis for comparison between differing qualifications. For example, a person whose highest year of school completed was Year 12, and whose level of highest non-school qualification was a Certificate III, would have those responses

crosschecked on the decision table and would as a result have their level of highest educational attainment output as Certificate III. However, if the same person answered 'certificate' to the highest non-school qualification question, without any further detail, it would be crosschecked against Year 12 on the decision table as Certificate not further defined. The output would then be Year 12. The decision table, therefore, does not necessarily imply that one qualification is 'higher' than the other. For more details, see Education Variables, 2002 (cat. no. 1246.0).

Level of education of current study

48 Persons who are identified in the Labour Force Survey as currently studying a school level qualification are not asked in SEW if they are currently studying for any non-school qualifications. Therefore, if the respondent was still attending school, their level of study was recorded as their current year of schooling. If the respondent had left school and was enrolled in formal study they were asked the level of the qualification.

PRODUCTS AND SERVICES

49 A Data Cube (spreadsheet) containing all tables produced for this publication is available from the Downloads tab of the publication. The Data Cubes present tables of estimates and proportions, and their corresponding Relative Standard Errors (RSEs).

50 An expanded range of statistics from the Survey are available in the publication Education and Work, Australia - Additional data cubes, May 2013 (cat. no. 6227.0.55.003).

51 For users who wish to undertake more detailed analysis of the data, the survey microdata will be released through the TableBuilder product. For more details, refer to the TableBuilder information, Microdata: Education and Work, Australia (cat. no. 6227.0.30.001).

52 A Confidentialised Unit Record File (CURF) has been released biennially from 2001 to 2011. A CURF will not be produced for the SEW 2013 data. For the 2013 survey, detailed analysis of microdata is expected to be available through a new online tool called DataAnalyser. Users will be able to undertake regression analysis, create new variables, produce confidentialised summary tables and scatterplots and use in-depth analysis techniques. The DataAnalyser products for the SEW13 is expected to be available in late 2014. For further details refer to the Microdata Entry Page.

53 Special tabulations are available on request. Subject to confidentiality and sampling variability constraints, tabulations can be produced from the survey incorporating data items, populations and geographic areas selected to meet individual requirements. These can be provided in printed or electronic form. All enquiries should be made to the National Information and Referral Service on 1300 135 070.

ACKNOWLEDGMENTS

54 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated; without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act 1905**.

PREVIOUS SURVEYS

55 Results of similar surveys have been published in previous issues. These surveys were conducted annually from February 1964 to February 1974, in May 1975 and 1976, in August 1977 and 1978, and annually in May since 1979. Results of previous surveys were published in Transition from Education to Work, Australia (cat. no. 6227.0) from 1964 to 2000. Since May 2001, the results of the survey have been published in Education and Work, Australia (cat. no. 6227.0).

CHANGES THIS ISSUE

56 Information on Citizenship status and Visa type has been added to Table 1 and Table 9. The population of Table 15 has changed from persons aged 65-74 years who are in the labour force or marginally attached to the labour force to all persons aged 65-74 years.

57 The terminology 'study for a qualification' has changed to 'formal study'.

NEXT SURVEY

58 The ABS intends to conduct this survey again in May 2014.

RELATED PUBLICATIONS

59 Refer to the Related Information tab for other ABS publications which may be of interest.

60 Current publications and other products released by the ABS are available from the ABS website. The ABS also issues a daily upcoming release advice on the website that details products to be released in the week ahead. The Education and Training Topics @ a Glance page also contains a range of information and useful resources regarding education statistics.

Glossary

GLOSSARY

Apprentice

An apprentice is a person aged 15-64 years who has entered into a legal contract (called a training agreement or contract of training) with an employer, to serve a period of training for the purpose of attaining tradesperson status in a recognised trade. In this survey, apprentices are identified by their answer to a question specifically pertaining to the **Australian Apprenticeship Scheme**. Note that **Australian School-based Apprenticeships** are excluded.

Australian Standard Classification of Education (ASCED)

The ASCED is a national standard classification which includes all sectors of the Australian education system: that is, schools, vocational education and training, and higher education. From 2001, ASCED replaced a number of classifications used in administrative and statistical systems, including the Australian Bureau of Statistics Classification of Qualifications (ABSCQ). The ASCED comprises two classifications: Level of education and Field of education. See Australian Standard Classification of Education, 2001 (cat. no. 1272.0).

Balance of state/territory

Comprises people usually resident in areas outside of the eight capital city Statistical Divisions (as defined in the Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0)).

Capital city

Comprises people usually resident in areas within the eight capital city Statistical Divisions (as defined in the Australian Standard Geographical Classification (ASGC) (cat. no. 1216.0)). Includes all residents of the Australian Capital Territory.

Certificate not further defined

Survey responses are coded to Certificate not further defined (n.f.d.) when there is not enough information to code them to Certificate I, II, III or IV in the Australian Standard Classification of Education, 2001 (cat. no. 1272.0), Level of education classification.

Completed

The completion of all academic requirements for the conferring of an award from an institution.

Completers

Persons aged 15-64 years who by May had completed the non-school qualification in which they were enrolled in the previous year.

Country of birth

Country of birth has been classified according to the Standard Australian Classification of Countries (SACC), Second Edition (cat. no. 1269.0).

Educational institution

Any institution whose primary role is education. Included are schools, higher education establishments, colleges of technical and further education and public and private colleges.

Employed

Persons who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
    - away from work for less than four weeks up to the end of the reference week; or
    - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
    - away from work as a standard work or shift arrangement; or
    - on strike or locked out; or
    - on workers' compensation and expected to return to their job; or
- were employers or own account workers who had a job, business or farm, but were not at work.

Employed full time

Employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Employed part time

Employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

Enrolled

Refers to persons registered for a course of study in the particular reference period (e.g. survey month, or previous calendar year) at an educational institution.

Field not determined

Field not determined includes inadequately described responses or where no responses were given.

Field of education

Field of education is defined as the subject matter of an educational activity. It is categorised according to the Australian Standard Classification of Education, 2001 (cat. no. 1272.0) Field of education classification. This publication presents the main field of education studied.

Field of trade

Refers to the occupation of an apprentice and is classified according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO), First Edition, Revision 1 (cat. no. 1220.0) Unit Group.

Formal Study

Any study being undertaken that will lead to a recognised qualification, issued by a relevant approved body, in recognition that a person has achieved learning outcomes or competencies relevant to identified individual, professional, industry or community needs. This includes study for a school qualification. In this survey, if the respondent was still attending school their level of study was recorded as their current year of schooling. If the respondent had left school and was enrolled in formal study they were asked the level of the qualification.

Higher education institution

An Australian institution providing higher education courses, e.g. universities; colleges of advanced education; institutes of advanced education; institutes of higher education; institutes of tertiary education; agricultural colleges; and some institutes of technology, and the equivalent institutions overseas.

Index of relative socio-economic disadvantage

This is one of four Socio-economic Indexes for Areas (SEIFAs) compiled by the ABS following each Census of Population and Housing, from various characteristics of persons resident in particular areas. The Index of Disadvantage summarises attributes such as income, educational attainment, unemployment and occupation skill levels. The index refers to the area (the Statistical Area Level 1) in which a person lives, not to the socio-economic situation of the particular individual. The index ranks areas on a continuum from most disadvantaged to least disadvantaged. A low score on the index (i.e. lowest quintile or decile) indicates a high proportion of relatively disadvantaged people in an area. Such areas include many households with low income, people with no qualifications and many people in low skill occupations. It should be noted that it cannot be concluded that an area with a very high score has a large proportion of relatively advantaged ('well off') people, as there are no variables in the index to indicate this. It can only be concluded that such an area has a relatively low incidence of disadvantage. The indexes used in this publication were those compiled following the 2011 Census. For further information about the indexes, see Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), 2011 (cat. no. 2033.0.55.001).

Industry

Industry data is classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (cat. no. 1292.0).

Level of education

Level of education is a function of the quality and quantity of learning involved in an educational activity. It is categorised according to the Australian Standard Classification of Education, 2001 (cat. no. 1272.0) Level of education classification.

Level of highest educational attainment

Level of highest educational attainment identifies the highest achievement a person has attained in any area of study. It is not a measurement of the relative importance of different fields of study but a ranking of qualifications and other educational attainments regardless of the particular area of study or

the type of institution in which the study was undertaken. See the Explanatory Notes for how highest level is derived.

Level not determined

Level not determined includes inadequately described responses or where no responses were given.

Non-school qualification

Non-school qualifications are awarded for educational attainments other than those of pre-primary, primary or secondary education. They include qualifications at the Postgraduate Degree level, Master Degree level, Graduate Diploma and Graduate Certificate level, Bachelor Degree level, Advanced Diploma and Diploma level, and Certificates I, II, III and IV levels. Non-school qualifications may be attained concurrently with school qualifications.

Not in labour force

Persons who were not in the categories ‘employed’ or ‘unemployed’.

Occupation

Occupation data is classified according to the Australian Standard Classification of Occupations, First Edition, Revision 1 (cat. no. 1220.0).

Other educational institution

Includes institutions or establishments that offer educational courses such as industry skills centres, professional or industry associations, equipment/product manufacturers or suppliers, and instances where insufficient information was available to determine the type of educational institution.

Qualification

Formal certification, issued by a relevant approved body, in recognition that a person has achieved an appropriate level of learning outcomes or competencies relevant to identified individual, professional, industry or community needs. Statements of attainment awarded for partial completion of a course of study at a particular level are excluded.

Reference week

The week preceding the week in which the interview was conducted.

School study

School study is participation in primary or secondary level education, regardless of the institution or location where the study is or was undertaken. It therefore includes such study undertaken in a Technical and Further Education (TAFE) or other institution.

School leavers

Persons aged 15-24 years who attended school in the previous year but were not attending school prior to May of the survey year. Note that these persons may be studying a school year level at a non-school institution (e.g. studying Year 12 at TAFE).

TAFE

A Technical and Further Education institution. In Victoria this may also be interpreted as Training and Further Education.

Unemployed

Persons who were not employed during the reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

Visa type

The visa the respondent held at the time of the interview, that allowed them to stay in Australia. Categories for type of visa that were collected:

- Permanent - Gives the holder the legal right to live in Australia on a permanent basis.
- Temporary - Holders of these visas are persons approved for non-permanent entry into Australia for economic, social, cultural or sporting benefit, including students, tourists, diplomats and working holiday makers.
- Student - Holders of these visas are people who have come to Australia for a specified period to study at an Australian educational institution.
- Provisional - A temporary visa that may lead to the granting of a permanent visa if the holder meets certain conditions.

Abbreviations

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ABSCQ	Australian Bureau of Statistics Classification of Qualifications
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCED	Australian Standard Classification of Education
CURF	confidentialised unit record file
LFS	Labour Force Survey
n.f.d.	not further defined
RSE	relative standard error
SACC	Standard Australian Classification of Countries
SE	standard error
SEIFA	Socio-Economic Indexes for Areas
SEW	Survey of Education and Work
TAFE	Technical and Further Education

Quality Declaration - Summary

QUALITY DECLARATION - SUMMARY

INSTITUTIONAL ENVIRONMENT

The Survey of Education and Work (SEW) is conducted in May each year throughout Australia as part of the Australian Bureau of Statistics (ABS) household survey program. For information on the institutional environment of the ABS, including its legislative obligations, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

RELEVANCE

The Survey of Education and Work provides information for a range of key indicators relating to the educational participation and attainment of persons aged 15 to 74 years, along with data on their transition between education and work.

The type of information collected includes: general demographic and labour force characteristics, participation in education in the survey month and in the year prior to the survey; type of educational institution attended; level of education of current and previous study; highest year of school completed; level and main field of highest non-school qualification; transition from education to work; unmet demand for education; and selected characteristics of apprentices including unmet demand for apprenticeships and traineeships.

The Australian Standard Classification of Education (ASCED) (cat. no. 1272.0) is used to classify the Level and Field of education. The ASCED is a national standard classification which can be applied to all sectors of the Australian education system including schools, vocational education and training and higher education.

As SEW is collected as a supplement to the Labour Force Survey (LFS), persons excluded from the LFS are also excluded from this survey (see Explanatory Notes in Labour Force, Australia (cat. no. 6202.0) for standard LFS exclusions). Additional exclusions from SEW are persons aged 75 years or older, institutionalised persons and boarding school pupils. Very remote areas, excluding Indigenous Communities, have been included since 2009. Persons permanently unable to work and persons aged 65 to 74 years who are not intending to work, or not in the labour force, or not marginally attached to the labour force were included for the first time in 2013.

TIMELINESS

The ABS has been conducting similar education and work surveys since 1964. These surveys were conducted annually, in February, from 1964 to 1974, in May 1975 and 1976, in August 1977 and 1978 and annually, in May, since 1979. Data from the survey are released approximately six months after they have been collected.

ACCURACY

The LFS is primarily designed to provide estimates for the whole of Australia and, secondly, for each state and territory. The LFS is based on a sample of private dwellings (approximately 29,000 houses, flats etc) and non-private dwellings, such as hotels and motels. Until 2012, the number of completed interviews for the Survey of Education and Work each year (after taking into account scope and coverage exclusions) was around 39,000. In 2013, the sample size was around 43,600 due to the inclusion, for the first time, of all persons aged 65 to 74 years. For a complete list of scope and coverage inclusions and exclusions for the Survey of Education and Work, refer to the Explanatory Notes.

Two types of error are possible in an estimate based on a sample survey: non-sampling error and sampling error.

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures.

Sampling error occurs because a sample, rather than the entire population is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey and about nineteen chances in twenty that the difference will be less than two standard errors. Relative Standard Errors (RSEs) of the estimates for this survey are included with this release.

Every 5 years, following the availability of data from the Census of Population and Housing, the ABS reviews the LFS sample design to ensure that the sample continues to accurately represent the Australian population. The latest review, based on 2011 Census data, was completed with the new LFS sample phased-in over the four months from May to August 2013. Overall, the 2011 sample design generally maintains standard errors at the levels targeted under the 2006 sample design. For more information see Information Paper: Labour Force Survey Sample Design, May 2013 (cat. no. 6269.0).

COHERENCE

The ABS seeks to maximise consistency and comparability over time by minimising changes to its surveys. However, sound survey practice requires ongoing development and maintenance to maintain the integrity of the data and the efficiency of collection.

From December 2012 to April 2013, the ABS conducted a trial of online electronic data collection. Respondents in one rotation group (i.e. one-eighth of the survey sample) were offered the options of self completing their labour force survey questionnaire online instead of via a face-to-face or telephone interview. From May 2013, the ABS has commenced the expansion of the offer of online electronic collection to each new incoming rotation group. For more information see the article Transition to Online Collection of the Labour Force Survey.

For changes between iterations of the SEW, please refer to the Explanatory Notes. For a full list of changes made to the LFS, see Chapter 20 of Labour Statistics: Concepts, Sources and Methods, 2013 (cat. no. 6102.0.55.001).

INTERPRETABILITY

Detailed information on the terminology, classifications and other technical aspects associated with the Survey of Education and Work can be found in the relevant web pages included with this release.

ACCESSIBILITY

Tabulated data and associated RSEs are available in spreadsheet format and can be accessed from Downloads. Additional tables are also available in a separate release in Education and Work, Australia - Additional data cubes (cat. no. 6227.0.55.003).

Data from this survey will also be accessible in the TableBuilder and DataAnalyser environments, enabling users to create their own customised output as required. For further details, refer to the Microdata Entry Page on the ABS website.

A Confidentialised Unit Record File (CURF) containing confidentialised microdata from the SEW has been released biennially from 2001 to 2011.

Data are also available on request. Note that detailed data can be subject to high relative standard errors which in some cases may result in data being confidentialised.

For further information about these or related statistics, contact the National Information and Referral Service on 1300 135 070.

Data quality (Technical Note)

TECHNICAL NOTE DATA QUALITY

RELIABILITY OF THE ESTIMATES

1 Since the estimates in this publication are based on information obtained from a sample, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings (or households) was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

2 Another measure of the likely difference is the relative standard error (RSE%), which is obtained by expressing the SE as a percentage of the estimate.

$$RSE\% = \left(\frac{SE}{estimate}\right) \times 100$$

3 RSE%s for the 2013 Survey of Education and Work (SEW) have been calculated using the Jackknife method of variance estimation. This involves the calculation of 30 'replicate' estimates based on 30 different sub samples of the obtained sample. The variability of estimates obtained from these subsamples is used to estimate the sample variability surrounding the estimate.

4 RSE%s of all of the estimates in this publication are included in the Data Cubes released as part of the publication and available from the Downloads tab of the publication.

5 Tables 2, 7, 8, 21 and 22 contain estimates collected from previous Education and Work surveys. The spreadsheets associated with this release contain RSE%s for these estimates. The RSE%s for the years prior to 2004 were calculated using the previous statistical SE models, which are available from each relevant issue of Education and Work, Australia (cat. no. 6227.0). For data from 2004, and later data, the RSE%s were directly calculated for each separate estimate. This method differs from that presented in the 2004 and 2005 publication, which describes using statistical SE models to calculate RSE%s for all time points. While the direct method is more accurate, the difference between the two is usually not significant for most estimates.

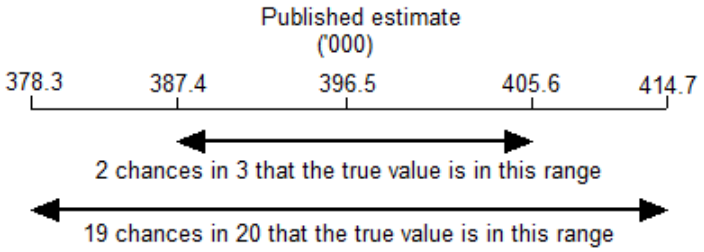
6 Only estimates (numbers and proportions) with RSE%s less than 25% are considered sufficiently reliable for most purposes. Estimates with RSE%s between 25% and 50% are presented with a cell comment to indicate they are subject to high sample variability and should be used with caution. Estimates with RSE%s greater than 50% are presented with a cell comment to indicate that they are considered too unreliable for general use.

CALCULATION OF STANDARD ERROR

7 Standard errors can be calculated using the estimates (counts or proportions) and the corresponding RSE%s. For example, Table 1 shows the estimated number of females in Victoria enrolled in study for a qualification was 396,500. The RSE Table corresponding to the estimates in Table 1 (included in the Data Cubes) shows the RSE% for this estimate is 2.3%. The SE is calculated by:

$$\begin{aligned} SE\ of\ estimate &= \left(\frac{RSE\%}{100}\right) \times estimate \\ &= 0.023 \times 396,500 \\ &= 9,100 \text{ (rounded to nearest 100)} \end{aligned}$$

8 Therefore, there are about two chances in three that the actual number of females in Victoria enrolled in a course of study was in the range of 387,400 to 405,600 and about 19 chances in 20 that the value was in the range 378,300 to 414,700. This example is illustrated in the diagram below:



PROPORTION AND PERCENTAGES

9 Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when the numerator is a subset of the denominator.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

10 As an example, using estimates from Table 1, of the 741,200 persons enrolled in a course of study in Victoria, 344,700 (46.5%) are males. The RSE% for 741,200 is 1.9% and the RSE% for 344,700 is 3.1% (see Table 1 Relative Standard Errors). Applying the above formula, the RSE% for the percentage of males in Victoria enrolled in a course of study is:

$$RSE\% = \sqrt{(3.1)^2 - (1.9)^2} = 2.4\%$$

11 Therefore, the SE for the percentage of males in Victoria enrolled in a course of study is 1.1 percentage points (=(2.4/100) x 46.5). Hence, there are about two chances in three that the percentage of males in Victoria enrolled in a course of study is between 45.4% and 47.6%, and 19 chances in 20 that the percentage is between 44.3% and 48.7%.

DIFFERENCES

12 Published estimates may also be used to calculate the difference between two survey estimates (numbers or proportions). Such an estimate is also subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

13 While this formula will only be exact for differences between separate and uncorrelated characteristics or sub populations, it provides a good approximation for the differences likely to be of interest in this publication.

SIGNIFICANCE TESTING

14 A statistical significance test for any comparisons between estimates can be performed to determine whether it is likely that there is a difference between two corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 11. This standard error is then used to calculate the following test statistic:

$$\frac{|x-y|}{SE(x-y)}$$

15 If the value of this test statistic is greater than 1.96 then there is evidence, with a 95% level of confidence, of a statistically significant difference in the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a real difference between the populations with respect to that characteristic.

OTHER SOURCES OF ERROR

16 The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.